

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of the claims:

1. (currently amended) An ink delivery apparatus, comprising a pressure tuned rolling piston having
 - a distal end having a pressure responsive portion; [and]
 - a first convolute portion coupled to said pressure responsive portion, said first convolute portion being configured to provide a first level of resistance against a negative pressure in said piston; and
 - a second convolute portion coupled to said first convolute portion, said second convolute portion being configured to provide further resistance against said negative pressure in said piston, and wherein when in a first condition at least a part of said second convolute portion surrounds at least a part of said first convolute portion.
2. (original) The apparatus of claim 1, wherein said pressure tuned rolling piston comprises an elastomeric material.
3. (original) The apparatus of claim 2, wherein said elastomeric material comprises EPDM/Butyl.
4. (original) The apparatus of claim 3, wherein said pressure tuned rolling piston comprises walls of substantially uniform thickness.
5. (original) The apparatus of claim 1, wherein said pressure responsive portion comprises a generally planar portion.
6. (canceled)
7. (currently amended) An ink delivery apparatus, comprising a pressure tuned rolling piston having

a distal end having a pressure responsive portion;
a first convolute portion coupled to said pressure responsive portion; and
a second convolute portion coupled to said first convolute portion;
wherein a perimeter of said second convolute portion is larger than a perimeter of said first convolute portion and wherein when in a first condition at least a part of said second convolute portion surrounds at least a part of said first convolute portion.

8. (original) The apparatus of claim 1, further comprising a fitment coupled to a proximal end of said piston.

9. (original) The apparatus of claim 8, wherein said fitment further comprises a fluid interconnect.

10. (withdrawn) The apparatus of claim 9, wherein said fluid interconnect is configured to fluidly couple a printing device and said piston.

11. (withdrawn) The apparatus of claim 10, wherein said piston provides an off-axis ink supply.

12. (withdrawn) The apparatus of claim 10, wherein said piston provides an on-axis ink supply.

13. (withdrawn) The apparatus of claim 8, wherein said fitment is configured to couple with a print head.

14. (currently amended) An ink delivery assembly, comprising:
at least one pressure tuned rolling piston having
a distal end having a pressure responsive portion;
a first convolute portion supporting said pressure responsive portion, wherein said first convolute portion is configured to provide a first level of resistance against a negative pressure in said piston;

a second convolute portion adjacent said first convolute portion, wherein said second convolute portion is configured to provide further resistance against said negative pressure in said piston, and wherein when in an first condition at least a part of said second convolute portion surrounds at least a part of said first convolute portion;

a proximal end opposite said distal end; and

a fitment coupled to said proximal end of said pressure tuned rolling piston.

15. (original) The assembly of claim 14, wherein a perimeter of said second convolute portion is larger than a perimeter of said first convolute portion.

16. (original) The assembly of claim 15, wherein said first convolute portion extends above said pressure responsive portion.

17. (original) The assembly of claim 14, wherein said first convolute portion includes a first aspect ratio and said second convolute portion includes a second aspect ratio, and wherein said first aspect ratio is larger than said second aspect ratio.

18. (original) The assembly of claim 17, wherein said first and second aspect ratios are selected based on predetermined operational specifications of a printing device.

19-21.(canceled)

22. (original) The assembly of claim 14, wherein said fitment further comprises a fluid interconnect.

23-52. (canceled)

53. (previously presented) The apparatus of claim 1, wherein said first convolute portion is configured to expand or contract based on ambient conditions.

54. (previously presented) The apparatus of claim 7, wherein said first and second convolute portions are configured to provide first and second levels of resistance against a negative pressure in said piston.

55. (previously presented) The apparatus of claim 7, wherein said second convolute member supports said first convolute member.

56. (previously presented) The apparatus of claim 7, wherein said pressure responsive portion is disposed inside said first convolute portion.

57. (previously presented) The apparatus of claim 7, wherein said pressure responsive portion is disposed above said first convolute portion.

58. (canceled)